theft article is then detected by the variation in the current induced in the loop.

As may be seen in figure 8, it is also possible to produce, using the process according to the invention, thin inductors or transformers 28, having a thickness which may, for example, be of the order of one millimeter, allowing these thin inductors or transformers to be mounted on a surface of a device.

A laminated composite strip comprising superposed laminated layers, each consisting of a nanocrystalline strip surrounded by layers of polymer material, is, for example, cut in the form of rectangles 28 in which holes, for example of square cross section, are made. The primary and secondary parts of a transformer may be produced by winding electrical wires 28' onto the component obtained.

In all the examples described above of how to implement the invention, the magnetic components are cut from the laminated strips or laminated composites by a mechanical process.

As shown in figures 9A to 9C and 10, it is also possible to produce magnetic components of complex shape from thin strips of nanocrystalline alloy by a chemical cutting process.

As shown in figure 9A, a laminate 29 is firstly produced from a strip 30 of nanocrystalline alloy which is coated on one of its sides with a strip 31 of polymer material, the bonding of the latter to the strip 30 being provided by a process as described above.

As shown in figure 9B, the laminated strip 29 is then covered with a layer 32 of a photosensitive resin and the layer 32 of photosensitive resin deposited on the external surface of the strip of nanocrystalline alloy of the laminate 29 is exposed to light rays 34 through a screen 33 of suitable shape.

As may be seen in figure 9C, the next step is to remove the layer 32 of photosensitive resin, partially exposed, either the exposed parts 32' or the

parts 32'' masked by the screen 33 and therefore not exposed, using a suitable solvent. For example, the solvent used may be water if the photosensitive layer consists of modified casein.

By applying a technique similar to etching, using an etchant such as an acid or ferric chloride, the components are cut along the unexposed parts of the layer 32.

As shown in figure 10, magnetic components 35 bonded to the polymer support strip 31 of the laminated material 29 are obtained. Thus, there is no risk of the components fracturing, these being protected and packaged on leaving the manufacturing line.

From the components thus obtained, it is possible, as shown in figures 11A to 11E, to manufacture a transformer integrated into a printed circuit or a discrete transformer by a process according to the invention.

In a first step, a laminate 36 (figure 11A) consisting of a strip 36a of nanocrystalline alloy and a film 36b of polymer material adhering to one side of the strip 36a is produced. For example, using the process described above with regard to figures 9A, 9B, 9C and 10, a product 38 comprising the plastic film 36b as substrate and thin successive magnetic circuits 37 made of nanocrystalline alloy, for example in the form of rectangular frames, adhering to the substrate is produced (figure 11B).

The product 38 is cut into portions, each comprising a thin magnetic circuit 37 fastened to a substrate portion. The cut portions 39 (figure 11C) are stacked on one another so that the magnetic circuits 37 are precisely superposed and separated by the plastic substrate layers 36b. The superposed layers 36b are adhesively bonded to one another, for example by applying heat and pressure, in order to obtain a composite laminated product 40 (figure 11D). The superposed plastic films 36b are drilled, as shown in figure 11D, in regions located inside and outside the

superposed magnetic circuits 37 in order to obtain a plurality of holes 41 passing through the composite laminate 40. The holes 41 are then internally metal-plated so as to create continuous conducting regions between the two faces of the composite laminate 40, at which faces the holes 41 emerge.

Next (figure 11E), electrical conductors such as 42 and 43 are produced, for example by chemical etching, on both faces of the composite laminate 40, said electrical conductors joining, on each face of the composite laminate 40, a first set of holes 41 and a second set of holes 41, respectively.

The conductors 42 and 43 and the plated-through holes 41 to which they are connected constitute the primary and secondary windings of the transformer 44, which can be used in a printed circuit.

Using this process, it would be also possible to produce other components, such as inductors intended to be inserted into a printed circuit or intercalated on a printed circuit and comprising at least one winding.

In the case of the methods of implementing the invention which have been described hitherto, it is one or both sides of strips made of nanocrystalline alloy, that is to say strips obtained after a heat treatment of an amorphous strip in order to obtain a nanocrystalline strip, that are covered.

It is also possible to apply the invention by depositing a covering layer containing a polymer on an amorphous strip which is then cut to the shape of magnetic components, these components then being heat treated in order to develop a nanocrystalline structure in the amorphous material of the components.

The various steps of such a process are the following:

1. one or both sides of an amorphous strip are coated with a complex solvent mixture which may consist of water, polymer binders, aluminates, silicates and fluxes;